## Out of This World: Gardens on Mars

The Imagine Mars Project, Huntington Botanical Gardens and Art Center College of Design Team
Up to Bring Students an Interdisciplinary Adventure of Science, Art and Design.

On September 30<sup>th</sup>, 2006 class will begin for students in the Art Center Saturday High program. While some students will be embarking on adventures in "still life," "advertising," and "animation," students in the "Gardens on Mars" class will be taking off to a new planet. For the next eleven weeks, these high school students will be studying the Martian environment, exploring garden design and investigating the ins and outs of botany on Earth and Mars.

Working in teams, students will follow the five steps of Imagine Mars and reflect, imagine, discover, create and share a model for a designed landscape on Mars. The Jet Propulsion Laboratory will provide access to topographical maps and models of the surface of Mars, enabling students to develop true "site specific" models for their Martian gardens. Fantastic and often bizarre forms of plant life on Earth will be studied at the Huntington Botanical Gardens' new plant lab located in the conservatory. Observation of plant forms and climactic adaptations here on Earth will lead to an expanded knowledge of our own environment. This deepened understanding of the life support systems of plants will help students develop their ideas of what a garden on Mars could be. Each week, students will hear from guest speakers from the Huntington and the Jet Propulsion Laboratory. Students will also develop a mentor relationship with professionals from these institutions, learning more about science, botany, art and design. A public exhibition and reception will be held at the end of the class to view the students' work.

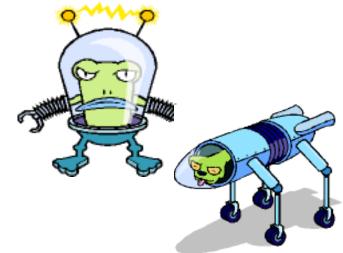
For more information about this project please email the Imagine Mars team at imaginemars@jpl.nasa.gov.

Would Your Students Like to Talk to a NASA Scientist about Mars?

We're waiting for you! Just email us at <a href="maginemars@jpl.nasa.gov">imaginemars@jpl.nasa.gov</a> and let us know where you are located, when your event is and how we can help support you. We have a team of volunteer experts all over the country that want to make your Imagine Mars experience the best it can be!

We can also pair you with a teacher or project leader who has already done Imagine Mars allowing you to share ideas and suggestions.

We can't wait to see YOUR Imagine Mars Project in the Project Gallery!



# Project of the Season

The Academy Homes Neighborhood Network in Roxbury, Massachusetts.

Using cardboard, ductape, bubble wrap, canopies, and a healthy dose of scientific knowledge, seven students from Roxbury, MA. transformed their youth center into their ideal Martian community. With help from NASA scientists, graduate students from local universities and civic leaders, the students researched how their community could thrive on Mars. They learned about the many environmental and social challenges they would face on the red planet, and then worked together to identify solutions to each. In the end, the students developed a list of essential elements that would support a healthy and sustainable community. Featured community elements included a communications headquarters, a hospital, a school, a fitness center, community housing and a hydroponics garden. The students created stations within their center to represent each community element. As a grand finale, the students got into character and invited the local community in to their Mars community for a quided tour. Over four hundred visitors attended.

Check Out the Imagine Mars Project Gallery to see a digital story about this awesome project: http://imaginemars2.jpl.nasa.gov/gallery/display/view.cfm?contactID=162&projID=151





Mars
Mission
Update

#### Mars Reconnaissance Orbiter Mission Status

(From http://mars.jpl.nasa.gov)

SHARAD Antenna Ready to See Below Mars' Surface - 9/20/06

Scientists and engineers waited anxiously for word that SHARAD, the Shallow Subsurface Radar antenna aboard Mars Reconnaissance Orbiter, was extended and functioning properly. Cheers and applause filled the mission support area when tests confirmed that the antenna is working and ready to begin scoping out the subsurface of Mars.



## Become a Cooperating Organization

The Cooperating organization commitment forms are now online on the Imagine Mars Web site. We are seeking the help of education, arts, technology and science-focused organizations to help spread the word about the Imagine Mars project.

Cooperating organizations will receive special advance notification of new site features, special invitations to webcasts and have the opportunity to submit their education-related news for the Imagine Mars e-mail newsletter. The Imagine Mars Project will also recognize cooperating organizations on the project site and link to their websites.

In turn, cooperating organizations will be asked to post an official link from their sites to the Imagine Mars project website and print periodic project-related news in e-mail and print newsletters about upcoming Imagine Mars events. Log on now to <a href="http://ImagineMars.jpl.nasa.gov/about/become.html">http://ImagineMars.jpl.nasa.gov/about/become.html</a> and download your copy of the cooperating organization commitment form and help us on our mission to bring the Imagine Mars project to students everywhere.



### About Imagine Mars...

The Imagine Mars Project is cosponsored by NASA and the National Endowment for the Arts (NEA). It is a Web-based initiative that provides you with lesson plans, Mars facts and other resources to lead student project teams. The goal of the project is to encourage students to explore their home community, to interact with scientists, artists, and community leaders, and to understand the different planetary environments on Mars. Ultimately, students complete a project that highlights the scientific and cultural elements they determine would be important to their imagined community on Mars.

The project site, <a href="http://ImagineMars.jpl.nasa.gov">http://ImagineMars.jpl.nasa.gov</a>, contains participation guides, resources for project leaders, profiles of artists, engineers, and scientists, a project gallery and other interactive features.



Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109

Phone: 818-393-6729 E-Mail: imaginemars@jpl.nasa.gov

On behalf of the National Aeronautics and Space Administration (NASA) the National Endowment for the Arts (NEA), the Jet Propulsion Laboratory (JPL) in Pasadena, California manages the Imagine Mars Project as part of the Mars Public Engagement program, which seeks to educate the public about scientific discoveries and benefits of NASA's missions to Mars. JPL is a division of the California Institute of Technology.



